



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,837	08/29/2001	Shawn R. Gettemy	PALM-3651	8549

7590 12/13/2005

WAGNER, MURABITO & HAO LLP
Third Floor
Two North Market Street
San Jose, CA 95113

EXAMINER

PIZIALI, JEFFREY J

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,837

Applicant(s)

GETTEMY ET AL.

Examiner

Jeff Piziali

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

By

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters apparently not mentioned in the description: 422 and 440 (see Fig. 4). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference characters in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2673

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3, 8, 17, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 3 recites the limitation "said transparent flexible thermoplastic outer film" in line 3. There is insufficient antecedent basis for this limitation in the claim.

6. The term "hidden by said decorative border" in claims 8, 17, and 24 is a relative term which renders the claims indefinite. The term "hidden" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear, for instance, from what and whose perspective the claimed electrical traces and circuits are supposed to be "hidden."

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-11 and 13-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 6,529,188 B1) in view of Conroy et al (US 5,686,705 A).

Art Unit: 2673

Regarding claim 1, Suzuki discloses a display assembly for an electronic device comprising: a display device [Fig. 10; 1]; a digitizer [Fig. 10; 4] (see Column 13, Line 50 - Column 14, Line 29) comprising a conductive film made of indium tin oxide [Fig. 5; 11] disposed above a digitizing element [Fig. 5; 22] (see Column 10, Lines 46-52), said conductive film capable of functioning in a non-planar surface (see Fig. 1A); and a single-piece three dimensional top cover [Fig. 1A; 4A] enclosing said electronic device and said digitizer [Fig. 1A; 11 and 12] and operable to allow mechanical transfer of external pressure to cause said conductive film to contact and activate said digitizing element responsive to said external pressure, wherein a point of contact on said single-piece three dimensional top cover is detected (see Fig. 12; Column 7, Line 42 - Column 8, Line 67). Although Suzuki teaches using conductive wires (see Column 10, Line 43 - Column 11, Line 16), Suzuki does not expressly disclose using a conductive polymer.

However, Conroy does disclose substituting conductive digitizer wires with a conductive polymer composite, such as conductive plastic (see Column 3, Lines 9-30, Column 4, Lines 21-32, Column 5, Line 55 - Column 6, Line 10, and Column 8, Lines 37-40). Suzuki and Conroy are analogous art, because they are from the shared field of manufacturing electronic touch panel devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use Conroy's conductive polymer in place of Suzuki's conductive film, so as to provide a rugged and reliable electronic device.

Regarding claim 2, Suzuki discloses said single-piece three dimensional top cover comprises a flexible thermoplastic outer film [Fig. 1A; 4A] having a three-dimensional top surface (see Column 10, Lines 46-52).

Regarding claim 3, Suzuki discloses said single-piece three dimensional top cover further comprises a supporting structure that is coupled to said transparent flexible thermoplastic outer film [Fig. 1A; 4B] (see Column 7, Lines 42-57).

Regarding claim 4, Suzuki discloses said single-piece three dimensional top cover is free of any steps, openings, or indentations (see Fig. 1A).

Regarding claim 5, Suzuki discloses said digitizer further comprises a plurality of electrodes and traces [Fig. 1A; 11 and 12] operable to register said point of contact when said conductive film makes contact with said digitizing element (see Column 7, Line 42 - Column 8, Line 67).

Regarding claim 6, Suzuki discloses said single-piece three dimensional top cover further comprises a decorative border [Fig. 11A; 15 and 20] constructed therein using an in mold decoration process (see Column 14, Lines 30-54).

Art Unit: 2673

Regarding claim 7, Suzuki discloses a decorative border is disposed directly beneath said single-piece three dimensional top cover and above said digitizer (see Fig. 11A; Column 14, Lines 30-54).

Regarding claim 8, Suzuki discloses said digitizer comprises electrical traces and circuits along a periphery that are hidden by said decorative border (see Figs. 5 and 11A).

Regarding claim 9, Suzuki discloses said single-piece three dimensional top cover has indentations to indicate button functions (see Fig. 12; Column 14, Line 55 - Column 15, Line 21).

Regarding claim 10, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, Suzuki discloses a display for an electronic device comprising: a display mechanism [Fig. 10; 1]; a single-piece three dimensional cover [Fig. 1A; 4A] that is bezel-less (see Fig. 1A) which encloses (see Fig. 12) said electronic device and is disposed over a top surface of said display mechanism and operable to allow mechanical transfer of pressure; and a resistive digitizer mechanism [Fig. 10; 4] (see Column 13, Line 50 - Column 14, Line 29) disposed beneath [Fig. 1A; 11 and 12] said cover comprising a conductive film made of indium tin oxide [Fig. 5; 11] capable of functioning in a non-planar surface (see Fig. 1A) disposed above a digitizing element [Fig. 5; 22] (see Column 10, Lines 46-52) and, responsive to said mechanical transfer of said cover, operable for registering contact between said conductive film

Art Unit: 2673

and said digitizing element corresponding to a contact point on said cover (see Column 7, Line 42 - Column 8, Line 67).

Regarding claim 11, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 13, Suzuki discloses said single-piece three dimensional cover has sufficient deflection under external pressure to cause conductive film to contact and activate said resistive digitizer mechanism (see Fig. 1A; Column 7, Line 42 - Column 8, Line 67).

Regarding claim 14, this claim is rejected by the reasoning applied in rejecting claim 4.

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 6.

Regarding claim 16, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 18, this claim is rejected by the reasoning applied in rejecting claim 9.

Regarding claim 19, this claim is rejected by the reasoning applied in rejecting claims 1 and 10; furthermore, Suzuki discloses a display assembly for an electronic device comprising: a display mechanism [Fig. 10; 1]; a back cover [Fig. 11C; 19]; a transparent single-piece cover

Art Unit: 2673

[Fig. 1A; 4A] having a bezel-less (see Fig. 1A) and three-dimensional top surface which encloses (see Fig. 12) said electronic device disposed over a top surface of said display mechanism; and a resistive digitizer mechanism [Fig. 10; 4] (see Column 13, Line 50 - Column 14, Line 29) disposed beneath [Fig. 1A; 11 and 12] said transparent single-piece cover comprising a conductive film made of indium tin oxide capable of functioning in a non-planar surface (see Fig. 1A) disposed above a digitizer element [Fig. 5; 22] (see Column 10, Lines 46-52) and operable for registering a contact point on said transparent single-piece cover corresponding to a point of contact between said conductive film and said digitizing element (see Column 7, Line 42 - Column 8, Line 67).

Regarding claim 20, this claim is rejected by the reasoning applied in rejecting claims 3 and 4.

Regarding claim 21, this claim is rejected by the reasoning applied in rejecting claim 13.

Regarding claim 22, this claim is rejected by the reasoning applied in rejecting claim 6.

Regarding claim 23, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 24, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 25, this claim is rejected by the reasoning applied in rejecting claim 9.

Response to Arguments

9. Applicants' arguments with respect to claims 1-11 and 13-25 have been considered but are moot in view of the new grounds of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.P.
2 December 2005



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800